Reliability Engineering and System Safety **40** (1993) 329–330

CONTENTS OF VOLUME 40

Number 1

Special Issue: Reliability Performance Analysis, and Evaluation of Programmable Electronic Systems, with Emphasis on Chemical Process Applications

The Impact of New Evidence on State-of-Knowledge Dependence 1
M. HAIM (Israel)

Importance of the Quality Management of Safety Analysis 5
V. ROUHIAINEN (Finland)

Modelling the Risk of Progressive Slope Failure: A New Approach 17
R. N. CHOWDHURY & S. ZHANG (Australia)

Non Linear Monte Carlo Reliability Analysis with Biasing Towards Top Event 31
M. MARSEGUERRA & E. ZIO (Italy)

Use of Constrained Lognormal Distribution in Reliability Analysis 43
D. L. KELLY (USA)

Reliability Analysis of Complex Systems Using Symbolic Logic 49
A. C. BUTLER, S. S. RAO & S. R. LECLAIR (USA)

Relative Entropy Method Using Tail Fractiles 61
V. SOLANA (Spain) & N. C. LIND (Canada)

Strategy and Tool Development for Nuclear Power Plant Design Synthesis with Measurement of Reliability and Simplicity 69
B.-K. MIN & S. H. CHANG (Korea)

Monte Carlo Finite Element Method of Structure Reliability Analysis 77
J. GUOLIANG, C. LIN & D. JIAMEI (People's Republic of China)

Optimal Design of Partially Accelerated Life Tests for the Lognormal Distribution Under Type I Censoring 85
D. S. BAI, S. W. CHUNG & Y. R. CHUN (Republic of Korea)

Technical Note

On the Treatment of Correlated Normal and Log Normal Input Variables in Uncertainty Propagation 93
Q. ZHANG (People's Republic of China)

Book Review

The Engineering Statistician's Guide to Continuous Bivariate Distributions. By T. P. Hutchinson and C. D. Lai. Rumsby Scientific Publishing, POB 76, Adelaide 97
(Reviewed by J. C. Helton)

Calendar 99

Number 2

On the Characteristics of Extreme Values for Series Systems 101
J. E. PANNULLO, D. LI & Y. Y. HAIMES (USA)

Methods for Combination of Expert Judgements 111
U. PULKKINEN (Finland)

The Use of Probability in Engineering Design—An Historical Survey 119
N. R. S. TAIT (UK)

Reliability Engineering and System Safety (**40**) (1993)—© 1993 Elsevier Science Publishers Ltd, England.

Development and Applications of a Three-Parameter Weibull Distribution with Load-Dependent Location and Scale Parameters 133
Y. S. SUN, M. XIE, T. N. GOH & H. L. ONG (Singapore)

Software Reliability Measurement in Imperfect Debugging Environment and its Application 139
S. YAMADA, K. TOKUNO & S. OSAKI (Japan)

Fault Tree Reduction and Quantification—an Overview of IRRAS Algorithms 149
K. D. RUSSELL & D. M. RASMUSON (USA)

FBOLES—Outline of a Frequency-Based On-Line Expert System Approach for Fault Diagnoses of Power Plants 165
Q. ZHANG, X. AN, J. GU, D. XUE & S. XI (China)

Integrating Internal Events in an External Event Probabilistic Risk Assessment: Tornado PRA Case Study 173
R. H. SUES, H. C. CHEN, E. A. OSWALD, L. A. TWISDALE & G. A. FLANNERY (USA)

A Preliminary Investigation of New Mechanical Product Development Based on Reliability Theory 187
K.-S. WANG, E.-H. WAN & W.-G. YANG (Taiwan)

Technical Note

A simulator-based Evaluation of Operator Behaviour in a Chinese Nuclear Power Plant Under ATWS Condition 195
H. XIANGRUI & Z. FUYUI (China)

Announcement 199

Calendar 201

Number 3

New Algorithms for Fault Trees Analysis 203
A. RAUZY (France)

Simulation of Stochastic Processes with Known Correlation Functions 213
D. B. PARKINSON (UK)

Probabilistic Risk Analysis and Risk-Based Priority Scale for the Tiles of the Space Shuttle 221
E. PATÉ-CORNELL & P. S. FISCHBECK (USA)

PRA As a Management Tool: Organizational Factors and Risk-Based Priorities for the Maintenance of the Tiles of the Space Shuttle Orbiter 239
E. PATÉ-CORNELL & P. S. FISCHBECK (USA)

Drilling Intrusion Probabilities for Use in Performance Assessment for Radioactive Waste Disposal 259
J. C. HELTON (USA)

Construction of Complementary Cumulative Distribution Functions for Comparison with the EPA Release Limits for Radioactive Waste Disposal 277
J. C. HELTON & H. J. IUZZOLINO (USA)

TREE-EXPERT: A Tree-Based Expert System for Fault Tree Construction 295
G. XIE, D. XUE & S. XI (People's Republic of China)

On Establishment of I/O Tables in Automation of a Fault Tree Synthesis 311
Y.-L. CHENG, H.-C. WEI & J. YUAN (Taiwan)

Residual Life, Linear Fatigue Damage Accumulation and Optimal Stopping 319
V. A. KOPNOV (Russia)

Calendar 327